corresponding to SEQ ID NO:10 and SEQ ID NO:11). The PCR products were resolved on a 4% agarose gel and stained with ethidium bromide.

As shown in Figure 5A, *H. pylori* nucleic acid was detected in the pre-treatment sample of the first patient (lane 3) and in all three pre-treatment samples of the second patient (lanes 7-9). After treatment began, less *H. pylori* nucleic acid was detectable (see treatment day 4 of the first patient (lane 4) and treatment day 7 of the second patient (lane 10)) until *H. pylori* nucleic acid was no longer detectable (see treatment days 10 and 14 of the first patient (lanes 5 and 6) and days 12, 13 and 18 and the post-treatment sample from the second patient (lanes 11-14)). In contrast, as shown in the corresponding lanes of Figure 5B, human nucleic acid was detected in each of the samples.

What is claimed is:

1. A method for detecting a *Helicobacter pylori* infection, the method comprising the steps of:

determining an integrity of a *Helicobacter pylori* nucleic acid present in a patient sample; and

identifying the patient as having a current *Helicobacter pylori* infection if the integrity of the nucleic acid exceeds a predetermined threshold.

2. The method of claim 1, wherein the identifying step comprises:

comparing the integrity of the *Helicobacter pylori* nucleic acid to an integrity of a non-*Helicobacter pylori* nucleic acid.

3. The method of claim 2, wherein the non-*Helicobacter pylori* nucleic acid is a patient nucleic acid.

4. The method of claim 2, wherein the non-*Helicobacter pylori* nucleic acid is an *Escherichia coli* nucleic acid.

5. The method of claim 1, wherein the patient sample is selected from the group consisting of stool, sputum, pancreatic fluid, bile, lymph, blood, urine, saliva, gastric juice, and vomitus.

6. The method of claim 5, wherein the patient sample is stool.

7. The method of claim 5, wherein the patient sample is saliva.

8. The method of claim 5, wherein the *Helicobacter pylori* nucleic acid is a DNA.

9. The method of claim 1, comprising the further step of adding an ion chelator to the patient sample such that the concentration of the ion chelator is at least 150 mM, thereby to preserve the integrity of the *Helicobacter pylori* nucleic acid.

10. A method for grading a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

determining an amount of high-integrity *Helicobacter pylori* nucleic acid present in a patient sample;

comparing said amount with at least two standards comprising high-integrity *Helicobacter pylori* nucleic acid, each standard being indicative of a different grade of *Helicobacter pylori* infection; and

grading a *Helicobacter pylori* infection based on said comparing step.

11. A method for grading a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

detecting a high-integrity *Helicobacter pylori* nucleic acid and a non-*Helicobacter pylori* nucleic acid in a patient sample;

determining an amount of the high-integrity *Helicobacter pylori* nucleic acid relative to the non-*Helicobacter pylori* nucleic acid in the patient sample;

comparing said amount with at least two standards of high-integrity *Helicobacter pylori* nucleic acid relative to non-*Helicobacter pylori* nucleic acid, each standard being indicative of a particular grade of a *Helicobacter pylori* infection; and

grading a *Helicobacter pylori* infection based on said comparing step.

12. A method for monitoring progression of a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

determining a first amount of a *Helicobacter pylori* nucleic acid in a first sample obtained from a patient;

determining a second amount of a *Helicobacter pylori* nucleic acid in a second sample obtained from the patient;

comparing the first amount with the second amount; and

classifying the infection as diminishing if the second amount is less than the first amount.

13. The method of claim 12, wherein the second sample is obtained no more than thirty days after the first sample.

14. A method for evaluating a course of treatment for a *Helicobacter pylori* infection, the method comprising the steps of:

obtaining a sample from a patient during a course of treatment or no more than thirty days after the course of treatment;

amplifying a high-integrity *Helicobacter pylori* nucleic acid present in the sample; and

identifying the patient as having a current *Helicobacter pylori* infection if the high-integrity *Helicobacter pylori* nucleic acid is present in the sample.

15. A method for evaluating the efficacy of a proposed treatment regimen for a *Helicobacter pylori* infection, the method comprising the steps of:

obtaining, from test patients diagnosed with an *Helicobacter pylori* infection, a test set of samples during the course of a proposed treatment regimen or no more than thirty days after the course of the proposed treatment regimen;

obtaining, from control patients diagnosed with an *Helicobacter pylori* infection, a control set of samples during the course of a control treatment regimen or no more than thirty days after the course of the control treatment regimen;

amplifying a high-integrity *Helicobacter pylori* nucleic acid present in the samples; and

comparing the amount of high-integrity *Helicobacter pylori* nucleic acid present in the test set of samples to the amount of high-integrity *Helicobacter pylori* nucleic acid present in the control set of samples.

16. A method for diagnosing a gastric disease in a patient, the method comprising the steps of:

detecting a high-integrity *Helicobacter pylori* nucleic acid in a patient sample; and

identifying the patient as having a gastric disease caused by a *Helicobacter pylori* infection if the high-integrity *Helicobacter pylori* nucleic acid is present in the sample.

17. A method for detecting a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

amplifying, from a patient sample,

a first *Helicobacter pylori* nucleic acid at least 200 nucleotides in length,

a second *Helicobacter pylori* nucleic acid at least 400 nucleotides in length, and

a third *Helicobacter pylori* nucleic acid at least 600 nucleotides in length;

detecting the amplified first, second, and third *Helicobacter pylori* nucleic acids; and

identifying the patient as having a *Helicobacter pylori* infection if the amplified first, second, and third *Helicobacter pylori* nucleic acids are detected.

18. A method for detecting a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

determining the integrity of patient nucleic acids in a patient sample comprising shed cells or cellular debris; and

identifying the patient as having disease if the integrity of the patient nucleic acids exceeds a predetermined threshold.